

Airland Battle Doctrinal Tenets in Operational Art: Do We Need an Output--Oriented Tenet That Focuses on the Enemy?

A Monograph
by
Lieutenant Colonel Gordon F. Atcheson
Infantry





School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

AY 89/90

Approved for Public Release; Distribution is Unlimited

DD Form 1473, JUN 86

22a. NAME OF RESPONSIBLE INDIVIDUAL

ATCHESON

LTC GORDON F.

Previous editions are obsolete.

SECURITY CLASSIFICATION OF THIS PAGE

ATZL - SWV

UNCLASSIFIED

22b TELEPHONE (Include Area Code) | 22c. OFFICE SYMBOL

<u>(913) 684-2138/3437</u>

ABSTRACT

AIRLAND BATTLE DOCTRINAL TENETS IN OPERATIONAL ART: DO WE NEED AN OUTPUT-ORIENTED TENET THAT FOCUSES ON THE ENEMY? by LTC Gordon F. Atcheson, USA, 53 pages.

The U.S. Army's AirLand Battle doctrine has contributed greatly toward codifying a comprehensive and widely accepted operational concept. With a new emphasis on fundamentals and principles, the essence of AirLand Battle doctrine is expressed in four tenets which are described as essential for success on the battlefield: initiative, agility, depth and synchronization.

These tenets appear to provide guidance on how to conduct operations, rather than on what should be done to achieve victory. It also appears that this input-orientation may result in an omission that may be particularly important in operational art. The first essential requirement of operational art is to decide what military condition, or end state, must be produced to achieve the strategic goal. This study examines the tenets to determine if they adequately guide the conduct of operational art to achieve desired end states in terms of results required to cause defeat of the enemy.

This monograph first looks at what doctrine is, why it is important and what it should do for an army. It then seeks to determine if the current tenets omit concepts important to operational art by comparing them to the key concepts of operational design. Next, the tenets are compared to principles of German and Soviet doctrines and to the U.S. Army's imperatives and principles of war. Finally, the tenets are compared to the essential elements of operational art to determine if the addition of an enemy-focused, results oriented concept would make a significant contribution to guiding the operational level of war.

The conclusions determine that the current tenets are not output-oriented on results, nor do they express concepts that guide operations focused on the enemy or an end state. On the other hand, these concepts are very evident in both German and Soviet doctrinal principles and the U.S. Army's doctrinal imperatives and principles of war. Additionally, the impact of this doctrinal deficiency in the tenets is found to be especially critical at the operational level of Both our key concepts of operational design and the essential requirements of operational art consider the concepts of center of gravity, and the need to identify and pursue goals and an end state, as critical to the successful conduct of war at the operational level. While the current tenets address two of the three essential elements of operational art--the ways and means--they omit addressing the first essential requirement -- the concept of achieving the The study presents convincing support to fill this ends. void.

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Name of Student:	Lieutenant Colonel Gordon T. Atc	heson A-1
Title of Monograph:	Airland Battle Doctrinal Tenets in Art: Do We Need an Output-Orient That Focuses on the Enemy?	<u> </u>
Approved by:		
Lieutenant Colonel L	David F. Young, M.A.	Monograph Director
Colonel William M.	anes, M.A., MMAS	Director, School of Advanced Military Studies
Hillip J. Brookes, Ph	Brolen. D.	Director, Graduate Degree Program
Accepted	this 13th day of dely	1990

TABLE OF CONTENTS

I.	Intro	oduction	••••••	Page 1	
II.	Setting the Doctrinal Stage				
III.	Analysis of Other Doctrines and Theory				
IV.	The Tenets in Current AirLand Battle Operational Art				
v.	Summary and Conclusion				
		ire 1, Compar Elemen	ison of ALB Tenets and Essentia ts of Operational Art	1 36	
Appendices:		Appendix A. Appendix B.	Principles	43 45	
		Appendix C.		46	
		Appendix D.	Comparison of ALB Tenets and Principles of War	47	
Endnot	es			48	
Biblio	graphy	,		52	

AIRLAND BATTLE DOCTRINAL TENETS IN OPERATIONAL ART: DO WE NEED AN OUTPUT-ORIENTED TENET THAT FOCUSES ON THE ENEMY? by LTC Gordon F. Atcheson, USA, 53 pages.

The U.S. Army's AirLand Battle doctrine has contributed greatly toward codifying a comprehensive and widely accepted operational concept. With a new emphasis on fundamentals and principles, the essence of AirLand Battle doctrine is expressed in four tenets which are described as essential for success on the battlefield: initiative, agility, depth and synchronization.

These tenets appear to provide guidance on <u>how</u> to conduct operations, rather than on <u>what</u> should be done to achieve victory. It also appears that this input-orientation may result in an omission that may be particularly important in operational art. The first essential requirement of operational art is to decide what military condition, or end state, must be produced to achieve the strategic goal. This study examines the tenets to determine if they adequately guide the conduct of operational art to achieve desired end states in terms of results required to cause defeat of the enemy.

This monograph first looks at what doctrine is, why it is important and what it should do for an army. It then seeks to determine if the current tenets omit concepts important to operational art by comparing them to the key concepts of operational design. Next, the tenets are compared to principles of German and Soviet doctrines and to the U.S. Army's imperatives and principles of war. Finally, the tenets are compared to the essential elements of operational art to determine if the addition of an enemy-focused, results oriented concept would make a significant contribution to guiding the operational level of war.

The conclusions determine that the current tenets are not output-oriented on results, nor do they express concepts that guide operations focused on the enemy or an end state. On the other hand, these concepts are very evident in both German and Soviet doctrinal principles and the U.S. Army's doctrinal imperatives and principles of war. Additionally, the impact of this doctrinal deficiency in the tenets is found to be especially critical at the operational level of Both our key concepts of operational design and the war. essential requirements of operational art consider the concepts of center of gravity, and the need to identify and pursue goals and an end state, as critical to the successful conduct of war at the operational level. While the current tenets address two of the three essential elements of operational art--the ways and means--they omit addressing the first essential requirement -- the concept of achieving the The study presents convincing support to fill this ends. void.

1.Introduction

Current U.S. Army warfighting doctrine is contained in the 1986 version of Field Manual 198-5, Operations. This manual is basically a reaffirmation and update of the 1992 version, which first introduced the operational concept and doctrine of AirLand Battle.1 Of critical importance to AirLand Battle doctrine is the statement: "Success on the battlefield will depend on the Army's ability to fight in accordance with four basic tenets: initiative, agility, depth and synchronization."2 By making these four concepts the embodiment of the principles of AirLand Battle, the Army was attempting to both simplify and focus its doctrine in a clear and concise statement of principles required for successfully conducting operations at the tactical and operational levels of war.

There is certainly a degree of danger associated with the attempt to express a warfighting doctrine in four words. Clearly, no four words could ever begin to fully encompass all the principles and rules of the doctrine. In recognition of this problem, FM 100-5 also contains the U.S. Army's accepted nine principles of war and ten imperatives. According to FM 100-5, these provide "timeless general guidance" and "prescribe key operating requirements," respectively. The principles of war are described as being "the enduring bedrock of U.S. Army doctrine." The imperatives "provide more specific guidance than the principles of war and battle tenets" and "are

historically valid and fundamentally necessary for success on the modern battlefield."3 Therefore, while the four tenets attempt to capture the essence of the doctrine, the doctrine recognizes that the concepts expressed in the principles of war and the imperatives are also essential ingredients for success.

Nonetheless, AirLand Battle doctrine has attempted to express the essence of success on the battlefield by choosing four words and elevating them to a position of preeminence. This raises the issue of whether or not the four words chosen completely express the doctrine. This study will approach that problem by examining the question of whether our current doctrinal tenets adequately guide our conduct of operational art to achieve desired end states in terms of results required to cause defeat of the enemy.

In searching for the answer, the study will first look at doctrine to determine what it is, why it is important, and what it should do for an army. It will then look at the doctrinal principles that guide the operations of two other highly regarded armies: the German and Soviet. While this approach orients the study at the theoretical level, brief historical examples will serve to provide additional evidence of these doctrines in practice. The study also compares the tenets to the imperatives and principles of war. Finally, the study will analyze the tenets in the context of how well they contribute to answering the essential questions required of operational art as specified

in FM 100-5.4 The conclusions derived from these analyses will lead to answering two key subordinate questions that support the main inquiry of the monograph. First, do the current tenets adequately guide the conduct of operational art? Second, would the addition of an output-oriented, enemy-focused tenet contribute to filling the void if the current tenets do not provide sufficient guidance?

Two limitations to the study deserve mention. First, the study focuses on the operational level of war. It does not analyze the tenets at the tactical level. Similarly, it does not examine the tenets at the strategic level of war. Second, the study uses the context of mid- to high-intensity war as opposed to the low-intensity end of the continuum of conflict. The intent of these delimitations is to provide focus to the study, not to ignore the important aspects of the excluded areas.

II. Setting the Doctrinal Stage

Doctrine, in a general sense, provides a guide for directing the activities of an armed force. The official acfinition of doctrine is: "Tundamental principles by which the military forces or elements thereof guide their action; in support of national objectives. It is authorizative must require judgment in application."5 Therefore, doctrine applies not only to how a force intends to conduct operations, but also to how it organizes, equips, educates and trains individuals and units.6 Formulating a correct and effective doctrine is therefore extremely important for an army.7

The importance of doctrine derives from what it provides to an armed force. As a unifying bond of understanding that guides the direction of a force's endeavors, doctring affects almost all the activities of a force. This new cole for doctrine as an integrating guide to coordinate the various functions of the force was first established in the U.S. Army in the 1975 version of FM 165-5. This expanded role was important because it approached doctrine as the unifying vision of the force. It based warfighting doctrine and the conduct of operations on identified threats. Organizations, equipment requirements and capabilities were then matched to both procurement and training strategies based on those threats. The key point, however is that all these functions were developed based on how the force was to fight the perceived threats.

Before beginning an analysis of the tenets, it is

appropriate to establish what doctrine should do for an army. Additionally, we will look at what the intent is for the tenets of AirLand Battle to contribute to this end, and then establish if any key ingredients appear to be missing. The result of this brief analysis will lead to a process that further examines what could be done to answer the question of sufficiency of our current tenets.

First, when attempting to establish what doctrine should do, we need not be frustrated because there are so many descriptions of doctrine. At the beginning of this section, we looked at two aspects of doctrine: the official definition, and why doctrine is important. These two aspects of doctrine can be summarized by the statement that doctrine is "the general consensus among military leaders on how to wage war."9 The purpose of doctrine as "authoritative fundamental principles by which military forces guide their actions"10 brings into focus the importance of the tenets of AirLand Battle in representing those fundamental principles.

These two quotations reinforce the concept that doctrine provides accepted principles that govern how a force will fight. Because we are interested in the operational level of war, we will not concern ourselves with the tactics, techniques and procedures that describe how to fight. It is important to note, however, that each of the tenets does describe how to fight. Initiative, agility, depth and synchronization definitely describe aspects of how operations should be conducted. It appears, then, that the tenets

very nicely fit what we have established as our definition and purpose of doctrine. Looked at in terms of the two citations above, the tenets are the "authoritative fundamental principles" "on how to wage war."

Next, we need to look at the purpose of the tenets and what they contribute to principles governing how a force will fight. Webster's dictionary defines tenet as "a principle, belief, or doctrine generally held to be true, especially one held in common by members of an organization or profession." In the development of AirLand Battle doctrine, the army leadership wanted to reduce the main conceptual principles representing the heart of the doctrine to a few key words, which became the tenets.11 We will further trace the evolution of the tenets in section IV; at this point, we are only establishing their purpose in our doctrine. FM 100-5 provides this purpose best:

The fundamental tenets of AirLand Battle doctrine describe the characteristics of successful operations. They are the basis for the development of all current U.S. Army doctrine, tactics, and techniques. All training and leadership doctrines and all combat, combat support, and combat service support doctrine are derived directly from, and must support these tenets.12

It is clear that the tenets are intended to be the basis for the development of all operational concepts and fundamentals supporting ...irLand Battle doctrine. They also prescribe requirements for successful operations. Additionally, they were intended to summarize the Army's operational concept of AirLand Battle.

Further, in the section introducing the tenets, FM 100-5 tells us: "AirLand Battle doctrine describes the Army's approach to generating and applying combat power at the operational and tactical levels." It goes on to say: "The object of all operations is to impose our will upon the enemy ~ to achieve our purposes." Finally, that section states:

Our operational planning must orient on decisive objectives. It must stress flexibility, the creation of opportunities to fight on favorable terms by capitalizing on enemy vulnerabilities, concentration on enemy centers of gravity, synchronized joint operations, and aggressive exploitation of tactical gains to achieve operational results.13

These excerpts and the remainder of the two brief paragraphs introducing the tenets clearly emphasize the importance of the principles of initiative, agility and synchronization. The principle of depth is mentioned also. What is also highlighted at least ten times in the twelve sentences of that section is the concept of orienting on the enemy. However, no word embodying enemy orientation was selected as a tenet. Is this a missing ingredient that deserves to be elevated to that status?

The easy answer is to say no, since it could be assumed that defeat of the enemy is the objective of battle. Many battles, and even wars, have been lost, however, because leaders ignored this supposedly evident focus on defeating the enemy's center of gravity. It does not matter to this study whether this possible omission was intentional or an oversight. What we must determine is whether an enemy and end state focus is missing, and then if the addition of that

function of providing operational planning guidance. Now that we have looked at the intended purpose of the teneto, we must look at what the current tenets actually contribute to guiding the application of compat power in order to determine if this omission of enemy focus really makes any difference.

The answer to this appears to be that the tenets all describe inputs to the warfighting process. They describe how we envision our forces conducting operations, not what and state or results we should achieve in terms of outputoriented effects on the enemy. An analogy to a football game emphasizes the difference in approach. A team could very possibly display outstanding intitiative and agility, emphasize depth in both offensive and defensive plays, and have superior synchronization of the skills required to move the ball downfield or prevent the opponent from doing the same. The team could significantly outgain its opponent by the superior application of these principles -- and still lose, because it did not focus its output on the key element, that of crossing the goal line and scoring more than its opponent. The emphasis on what to do, rather than how to do it, is the critical difference.

This example is a simple form over substance relationship. Inputs, or the <u>how</u>, are the form; outguts, or the <u>what</u>, are the substance. The tenets, by their nature of describing the <u>how</u> of doctrine, are input-oriented form. As

such, they may likely not provide sufficient focus on the enemy to ensure his defeat.

This difference of how versus what has an interesting and applicable parallel in the currently preferred method of conducting operations. The current TRADOC commander, General John W. Foss, has emphasized "mission tactics" for commanders. This concept is reflected in General Foss's quote of the Patton statement: "Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity."14 This concept recalls the successful German principle of mission-oriented orders embodied in Auftragstaktik, a broad concept which in part stipulates that commanders should give subordinates general directions of what is to be done, allowing them the freedom to determine how to do it.15 Since this way of conducting operations, as accepted by Army leaders, emphasizes what over how, it is disturbing that the tenets guiding our operations are not in line with it.

The missing ingredient, then, appears to be that our tenets are not unified and directed by an output-oriented concept that provides focus on an end state for operational efforts. This is contrary to how the U.S. Army normally approaches missions, as described below in the training management and campaign planning processes.

Then conducting the extremely important process of planning training for a unit, commanders start with mission analysis, establish goals and objectives, then establish a training strategy oriented on mission essential tasks.15

This is an output-oriented process. Its principles orimarily guide the <u>what</u> of training, not the <u>how</u> to do it.

Similarly, when developing campaign plans in the varfighting process, commanders analyze the mission and establish objectives based on a careful evaluation of the enemy. FII 190-5 describes the process:

The principal task of the theater commanders and their subordinate commanders is to concentrate superior strength against enemy vulnerabilities at the decisive time and place to achieve strategic and policy aims.

Additionally:

Campaign plans set long-term goals - strategic aims such as control of a geographic area, reestablishment of political boundaries, or defeat of an enemy force in the theater of operations.

And finally, the campaign planning process states: "Initially, the commander must specify how the enemy is to be defeated."17

Inherent in this campaign planning process, AirLand Dattle doctrine espouses three key concepts of operational design central to the conduct of campaigns and major operations: the center of gravity, lines of operation, and the concept of culminating points. FM 183-5 says of the center of gravity: "Its attack is - or should be - the focus of all operations"; and further:

Identification of the enemy's center of gravity and the design of actions which will ultimately expose it to attack and destruction while protecting our own, are the essence of operational art.13

Lines of operation define the directional orientation of a

force in relation to the enemy and connect the force with its base(s) of operation and its operational objective. Finally, FM 100-5 tells us that the attacker must seek to secure operationally decisive objectives before reaching a culminating point, while the defender seeks to bring the attack to its culminating point before the attacker reaches an operationally decisive objective.19

These key concepts of operational design in the campaign planning process, like the training management process, clearly have the characteristics of being output-oriented and focused on a goal. They also provide guidance in the form of what to do rather than how to do it.

The evidence thus far requires us to ask the obvious question: If the concepts central to the design and conduct of campaigns and major operations require this form of guidance, is not something missing when the tenets, which are supposed to be the embodiment of the principles of our doctrine, completely overlook or even contradict these three characteristics of orientation, focus and form of guidance?

The answer is certainly obvious that those important characteristics are missing from the concepts expressed in the tenets. However, the critical follow-on question is whether or not that omission makes an important difference in providing guidance for the conduct of operations. The remainder of the study examines the tenets in various contexts to provide that answer.

III. Analysis of Other Doctrines and Theories

One meaningful place to search for our answer is to look at the doctrine and theory of other armies. If those doctrines contain the elements of what versus how, and emphasize the concepts of output-oriented energy-focused and states, then we might consider that it is important to providing doctrinal guidance. If the principles of other doctrines do not contain what we found to be missing in our tenets, then perhaps the omission is not important.

Some words about using principles to guide the conduct of war will prove enlightening at this point. Ulysses 5. Grant said of them: "If men make war in slavish obedience to rules, they will fail."20 This was said by the man who "'invented' operational art as it is currently understood."21 Liddell Hart also doubted the value of principles:

The modern tendency has been to search for principles which can be expressed in a single word-and then need several thousand words to explain them. Even so, these "principles" are so abstract that they mean different things to different men, and, for any value, depend on the individual's own understanding of war. The longer one continues to search for such omnipotent abstractions, the more do they appear a mirage, neither attainable or useful-except as an intellectual exercise.22

There are opposing views on the efficacy of principles.

One says:

Strategists and tacticians alike, who traffic in intangibles and imponderables, are guided-consciously or unconsciously-by the Principles of War, a collection of basic considerations accumulated over the centuries.23

Thile another states more strongly:

It is universally agreed upon, that no art or science is more difficult, than that of war; This art, like all others, is founded on certain and fixed principles, which are by their nature invariable; the application of them can only be varied; but they are themselves constant.24

Finally, one soldier, who pelieved principles were important, attempted to distill centuries of military art into one principle: "Nit the other fellow as quick as you can, as nard as you can, where it hurts him the most, when he ain't lookin'."25

In spite of some who would speak against having any principles of war, the fact is that the U.S. Army espouses them. Many other countries also enumerate principles to guide their conduct of operations.

We will use the doctrinal principles of the German and Soviet Armies as a basis of comparison with the tenets. There are several reasons for selecting these armies. First, both distinctly recognize the operational level of war. Second, their principles and our own are developed from the common experience of World War II. Finally, one is our strongest ally, while the other poses our greatest threat. If their doctrines contain the concept we have found missing in AirLand Battle, then it would be of great concern to determine of what import is that omission.

How do each of the armies view principles? We have seen that the U.S. Army considers them to provide timeless general guidance and that they are the enduring bedrock of

Goctrine.26 The tenets, in their position of preeminence, are the basis of all Goctrine and are considered essential for success.

Ohile the German army enumerates principles, it's view of their purpose is somewhat different:

Command and control of armed forces is an art, a creative activity based on character, ability and mental power. Its doctrines allow no exhaustive description. Command and control of armed forces is neither compatible with formulas nor with rigid regulations and systems. Every commander, however, must be quided by clear principles.27

The Soviet view of principles is much more complex. Soviet army believes that Marxist-Leninist insight provides a superior theory because it is based on a better, deeper, and therefore, more correct understanding of the principles governing warfare. 28 The Soviets have several sets of principles, each corresponding to different levels of war, including law of war, military art, strategy, operational art and tactics. The Soviets also believe that military doctrine is not fixed; it is constantly under review and revision to meet changing political and military conditions.29 explains why different sources for principles, published only two years apart, provide different lists. The Soviet principles used for comparison in this monograph are therefore synthesis from different a sources to best correlate to the concepts expressed in the U.S. Araw tenets.30 The final aspect of Soviet principles is that they are developed in a process that melds theoretical research from the social and physical sciences (under the Academy of

Sciences, not the Academy of the General Staff), practical economic and technical capabilities, and political goals (from the Central Committee of the Communist Party), into a logical and coherent doctrine.31 The Soviets regard the principles as follows:

Principles, which are based on laws, contain recommendations for the most suitable actions. They tell us precisely what we must do to attain victory over the enemy, and how we must do it. But these recommendations are for the average situation....This is why in theory....they are all recognized to be identically important, while in practice certain principles may be dominant.... Successful application of the principles of compatis directly dependent on the creativity of the commander.32

It is evident each of the armies views principles somewhat differently. In degree of rigidity of application, it appears they rank from least to most rigid in the order: German, U.S., then Soviet. The German principles are more flexible and general. The U.S. Army in reality has three sets: principles of war, imperatives and tenets. The Soviet Army has the most broadly based, primarily due to the communist political system. Theirs are also structured to correlate with the different levels of war, are more specific in nature, but also undergo change much more than the other two armies. All the armies, however, recognize that the principles are only a guide to action and require flexibility in application.

This study will compare the German and Soviet principles separately to the AirLand Battle tenets. In each of the several appendices comparing the tenets to other sets of

principles, we will use a matrix. Tenets will be listed as column headings. The sixth column of the matrices, headed "end state", is a label used to express the concept of output-oriented, enemy focused end state we identified as missing from the current tenets. While this term may not express the entire concept, it will serve as an adequate label in the matrix. The compared sets of principles will be listed as row headings along the left side of the matrix. An "X" placed at the intersection of a tenet and another principle indicates some degree of correlation between the two.

This comparison for the Germany Army is shown in matrix form in Appendix A. (Page 43) German doctrine is found in HDv 109/100, Command and Control of Armed Forces. Both the manual and the chapter containing the principles are entitled command and control, which the U.S. Army considers a tactical operating system. Nonetheless, this manual and the principles are the equivalent of FM 100-5 and its tenets.

It is apparent from Appendix A that the missing concept has a high correlation to German doctrinal principles. One or more of the tenets can also be linked to most of the German principles. For this and later comparisons, the tenets were interpreted in their broadest possible meaning. Since none of the tenets are output-oriented, nor do their descriptions encompass an enemy-focused end state, it was necessary to extrapolate their input-orientation in order to link them to German principles that had those

characteristics. One example will illustrate that point and also add credence to the need for enemy focus and a concept of end state.

The second German principle, coordinate efforts focused on common objectives, is linked to both synchronization and our missing principle. There is no doubt that it correlates to our missing concept. Coordinated efforts focused on a common objective are definitely output-oriented. Focusing on a common objective certainly entails focusing on the enemy, while objective is a sub-set of end state. However, the linkage with synchronization is not so clear. Synchronization is described in FM 100-5 as:

Synchronization is the arrangement of battlefield activities in time, space and purpose to produce maximum relative combat power at the decisive point. Synchronization is both a process and a result. Commanders synchronize activities; they produce synchronized operations.33

"Maximum relative combat power" describes a situation, not an output, focus on defeat of the enemy, common objective or end state. The description draws close to the concept of objective when it mentions "result," but the result sought is "synchronized operations" rather than some effect on the enemy. Nonetheless, since we can assume the result of synchronized operations has an effect on the enemy and is focused on an objective, the comparison links the two principles.

This comparison, and the ones that follow, make many similar extrapolations. This allows linkage of the tenets, even when they do not by themselves fully express the total

concept of the comparison principles, which include the concepts of output-orientation, enemy focus, end state or result, and are oriented towards what versus how.

As a result of the comparison, we wanted to determine if a large number of German principles embodied the missing concept. The answer is that almost all of them do. The German Army obviously expresses in a very strong way in their doctrine the element we have found missing in ours. They clearly consider that missing concept to be very important for successfully guiding operations to defeat an enemy.

A final note on the German principles is particularly enlightening. They emphasize that "Mission-oriented command and control is the first and foremost" principle. The mission specifies the objective, but not the way it is achieved.34 "The superior commander informs the subordinates of his intentions, designates clear objectives and provides the assets required." Additionally, "He gives orders concerning the details of mission execution only for the purpose of coordinating actions serving the same objective." Finally, "Subordinate commanders can thus act on their own in accordance with the superior commander's intentions; they can immediately react to developments in the situation and exploit favorable opportunities."35

This concept of mission-oriented orders, or Auftragstaktik, is not expressed in any of our tenets, yet the German Army considers it their most important principle. The concept of mission-oriented orders requires elements of the tenet of initiative in execution, but, even as expressed by General Foss in mission-tactics, this concept is much broader and clearly emphasizes a focus on the principle of objective. Combined with the very strong linkage between our missing tenet and the other German principles, the fact that we do not address their most important one argues strongly for its inclusion to better guide the conduct of our operations.

The second comparison, between Soviet principles and the tenets, is shown in Appendix B. (Page 45) It is necessary to attempt to view the Soviet principles in the proper context. We have seen the high value they place or principles. An understanding of Marxist-Leninist ideology, the Soviet military tradition, and the society in which the doctrine exists is also important. Literal interpretations of words are often difficult, and may not correspond to U.S. meanings. For example, consider the Soviet view of initiative compared to ours. "To the Soviets, initiative means finding ways to execute the plan as written in spite of difficulties. It does not include the concept of revising intermediate steps to meet changed circumstances."36 In spite of these difficulties, a comparison that fulfills the needs of this study is still possible.

This comparison at Appendix B shows that AirLand Battle tenets have much less correlation to Soviet principles than they do to the German ones. While that is of interest in itself, it is not particularly germane to this study. What is important is that we again see the highest degree of

concept. Most of the Soviet principles and our missing concept. Most of the Soviet principles contain the concepts of what versus how, a focus on the enemy, output versus input orientation, and the concept of mission, goal or objective orientation to provide guidance for successful operations. Again, they obviously consider these concepts, missing from our tenets, to be important to provide guidance which leads to success in campaigns.

Of some note are the principles that do not link to a tenet or the missing concept. Two of the three that do not link express logistical or sustainment concepts. This was also true of the German principle of providing adequate logistical and medical support not having linkage with any of the tenet concepts. Perhaps sustainment is also a candidate to be an additional tenet. The third Soviet principle that did not have linkage concerns high readiness of units. has two aspects. The first expresses the concept of the need for a strong and prepared military force in being , which is very understandable from the standpoint of Russian historical experience. The second aspect is to leave nothing to chancethere must be well developed plans to meet contingencies. would consider these concepts to be more in the tactical realm, but this theme runs through Soviet doctrine from the level of the laws of war at the strategic level all the way through tactical principles.37

Having compared the tenets to German and Soviet principles, it is instructive to briefly consider the

application of the missing concept in actual operations by these two armies. There are many historical operations which illustrate that the concepts expressed by our missing tenet were decisive to the outcome of the campaign. There is some marginal utility, though, with trying to compare current doctrinal principles to past campaigns. While much of the doctrine of both countries is based on World War II experiences, each doctrine has evolved since then. Nonetheless, World War II examples will serve the purpose if they show that output-orientation, and focus on the enemy and an end state, were important to successful operations.

One appropriate German example is Field Marshall Erich von Manstein's 1942-43 winter campaign on the southern flank of the Russian front against a numerically superior force. This was a four-phased campaign, the final phase of which intended to deliver a counterblow and regain the initiative for a bogged down offensive around Stalingrad.38 operational constraints imposed by Hitler, Manstein conducted operational maneuvers resulting in the Battle of Kharkov. As Manstein says: "Our object was not the possession of Kharkov but the defeat-and if possible destruction-of the enemy units located there."39 Several of the reasons for Manstein's success are attributable to him personally: vision, determination, willingness to take risks, and his skill as an operational commander. Another reason falls in the physical domain-German forces were superior to Russian soldiers. There were also two reasons for success based on operational principles: willingness to maneuver and his

focus on enemy forces.40 It is the decisiveness of this latter principal that confirms the need to incorporate this concept into our tenets. In another campaign, Manstein's correct identification of the Soviet force's center of gravity and his focus, by the indirect approach, to defeat it during operation <u>Bustard Hunt</u> is another excellent example that reinforces the importance of this concept to the principles of operational art.41

The Soviet defensive Battle of Kursk provides similar lessons. The Soviet use of reserves in operational depth provided forces focused on defeating German penetration of a huge Soviet salient. In this case, mobile armored counterattack forces were not orienting on preventing penetration, but rather on defeating German forces that had penetrated. The end state was to preserve the integrity of the defense to prevent the destruction of one or both of the Fronts involved.42 This focus on the enemy, and on setting conditions to achieve an end state, resulted in operational success. The application of our current tenets by themselves, without this focus, would probably not have provided sufficient guidance to achieve the same success.

Having looked at the comparison of principles and supporting historical examples of both our strongest ally and greatest potential threat, we might find it instructive before concluding this section to determine what the doctrine of our major alliance says regarding an output-oriented enemy-focused end state. This North Atlantic Treaty

Organization (NATO) doctrine, which we would use in concert with Germany against the Soviets should war occur, will set the conditions for U.S. Army campaigns. Our doctrinal tenets should therefore be in harmony with it.

The doctrine of NATO lists "The Selection and Maintenance of the Aim" as one of its key operational fundamentals. This concept states: "In every military operation, it is essential to select and define the aim clearly. The selection of the aim is one of the commanders most important duties; "43 NATO doctrine further emphasizes the importance of focusing all operational efforts by stating: "The aim must be circulated...so that subordinates can make it the focal point in their planning. There must be no doubt as to what the military force is to achieve."44 This clear aim, or end state, ensures that the effective use of ways and means are directed towards the attainment of clearly established specific goals. Since NATO doctrine states this requirement so emphatically, it is surprising that we have found the tenets of AirLand Battle lacking in this regard.

We have seen prior to this section that the purpose of doctrine is to guide a force's actions to achieve objectives. We have also seen that the purpose of the tenets is to guide our operational planning to orient on decisive objectives, and to stress concentration against enemy centers of gravity to achieve operational results. Finally, we have seen that the campaign planning process, using the key concepts of operational design, also focuses on an end state. This

campaign planning process stated that the enemy center of gravity should be the focus of all operations. It also said that the essence of operational art was the identification and design of actions that attacked and destroyed the enemy's center of gravity. Therefore, we have found that the tenets do not fulfill the stated purpose of doctrine or the intent FM 100-5 says they were to serve. Nor do the tenets meet the requirements of the key elements of operational design at the operational level of war. Finally, they do not address one of the key operational fundamentals of NATO doctrine, which is a critical omission.

In addition to these previously established shortcomings, we have found in this section that the tenets do not express concepts considered to be very important in both German and Soviet doctrinal principles. Having established these deficiencies, we will look in the next section at the internal consistency of our doctrine, and how well the tenets support the requirements of operational art.

IV. The Tenets in AirLand Battle Operational Art

At this point, it is both necessary and enlightening to briefly trace how we arrived at the concepts of our current AirLand Dattle doctrine in order to better understand our analysis of the tenets. Following that, we will look at the tenets of AirLand Battle doctrine in relation to its imperatives, the principles of war, and the essential requirements of operational art to further pursue whether it would be beneficial to add an output-oriented, enemy-focused tenet. The process, then, will be to look at the coherence and completeness of the doctrine in the context of linkage between the imperatives, principles of war and the tenets, and then look at the tenets in terms of sufficiency to attain the stated essential requirements of operational art.

The operational concept of AirLand Battle and the new emphasis on the operational level of war were introduced in the 1982 version of FH 100-5.45 The doctrine expressed this version resulted from intense depate and critique of the active defense doctrine in the 1975 FM 193-5. The term "Air Land Battle" was selected by General Donn A. Starry in January 1981.47 It was selected as an overarching descriptive term to combine the developing concepts of the "integrated battlefield" and the "extended battlefield." 48 The February 1981 Coordinating Draft of FM 139-5 did not mention the term AirLand Battle. The introduction of AirLand Battle as the Army's operational concept was first introduced in the January 1982 Final Oraft

and was referred to for the first time as doctrine.40 While the initial view of developing a new FT 100-5 had centered around revising and correcting perceived deficiencies in the 1976 version, the effort was soon expanded as the need for a broader doctrine became apparent. This broader doctrine was an attempt, among other things, to focus more on maneuver versus attrition warfare. It also incorporated ideas of the extended and integrated battlefield, the moral and psychological factors, the concepts of Auftragstaktik and Schwerpunkt, and the stress on principles and fundamentals.50

The stress on principles in the doctrinal review process resulted in the selection of the forerunners of our current tenets and imperatives, and also the inclusion of the principles of war in an appendix. The principles of war were not discussed in the 1976 FN 100-5. The tenets and imperatives have been revised since their introduction, as briefly traced below. The fact that the tenets and imperatives have been changed several times during the development of our current doctrine highlights the uncertainty that they were all-inclusive or definitive in describing the doctrinal concept.

The first four tenets were different than the ones we now know so well. The February 1981 Coordinating Draft of FT 199-5 did not refer to them as tenets, but said: "The U.S. Army's operational concept for modern battle is summarized by the following words: initiative, violence, integration and

depth." 51 The choice of these four words was intended to reduce the concepts of the emerging AirLand Battle doctrine to key elements emphasizing the themes that were to emerge as the heart of the coctrine. General Starry rejected two of the concepts after further consideration. He selected instead the concepts of synchronization and agility. Synchronization, which is closely akin to integration, was based on the concept suggested by General William E. DuPuy, which contended that there was a compat value to effective command and control which synchronized combat power. The concept of agility was advanced by General William E. Richardson, and was adopted because it was suggestive of the maneuver orientation of the new doctrine. 52

The January 1982 Final Draft first introduced the four principles as tenets: "Success on the modern battlefield will depend on the Army's ability to fight in accordance with the basic tenets of the AirLand Battle, which are best summarized by four words:"53 The August 1982 Ft 100-5 institutionalized the concepts of the tenets more directly: "Success on the modern battlefield will depend on the basic tenets of AirLand Battle doctrine: initiative, depth, agility and synchronization."54

The current 1985 version of FM 108-5 expresses these concepts in similar terms. The fact that the development and selection of these four concepts underwent such careful scrutiny and change in the attempt to distill the essence of the doctrine does not obscure the possibility that a key

ingredient may have been missed, as we have already determined - that of providing an enemy-focused, output-oriented concept.

The second body of fundamentals, the imperatives of AirLand Battle, have also changed significantly over time. The important place the imperatives hold in our doctrine is indicated by their purpose. Their purpose is to prescribe key operating requirements which provide more specific quidance than the tenets and principles of war. Also, they are considered to be fundamentally necessary for success on the modern battlefield. 55 The 1982 Coordinating Draft listed 21 of these requirements for success. They were described as underlying fundamentals of modern battle and a quide to action. 56 They were reworked and reduced in number because of criticism of the length of the list. The final 1982 version listed seven fundamentals, and first referred to them as imperatives. Our current 1986 manual contains a revised and expanded list of 15 imperatives.

These changes to the imperatives over time are important for two reasons. First they show an uncertainty in their development that raises questions regarding their current coherence and completeness. Second, since the imperatives have evolved to prescribe "key operating requirements", it is useful to use them as a basis of comparison with the tenets to determine if the tenets, as the foremost principles of our doctrine, capture the essence of these required fundamentals. The study will provide that comparison after briefly

reviewing the characteristics of operational art, which is important because it provides the context in which we will study the tenets.

Operational art is "the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations." 57 This suggests that commanders at the operational level must "sequence tactical activities and events to achieve decisive objectives." 50 Therefore, "identifying the enemy's operational center of gravity, his source of strength or balance, and concentrating superior combat power against that point to achieve a decisive success is the essence of operational art."59

the primary concept is to effectively employ forces to achieve an established end state in terms of effects on the enemy to achieve a strategic goal. The whole concept of operational art, then, supports the need to fill a void in the end-state concept, which is omitted in the principles expressed by the current tenets. We will explore this shortly in the context of ends, ways and means, as introduced below.

Operational art can be viewed as a process which links the military force (means) and the manner in which we employ it (ways) to achieve decisive objectives or results (ends). Clausewitz stated that art was "the employment of the available means for the predetermined end."50 "Doctrine

(AirLand Battle) as a form of art, links the military force to the end result."61 The tenets of our doctrine, therefore, should provide guidance in the form of focus on the enemy and results-orientation in order to ensure the ways and means are effectively linked to achieving ends.

Having introduced the concepts and some background the imperatives, principles of war, and the context of operational art, we need to compare them to the tenets to determine the coherence of our doctrinal principles and the importance of any omissions in the tenets. In order to determine the importance of any omission, it is appropriate here to briefly review what it is we have found missing. It appears very clear, as established in the previous two sections, that there is an omission of a key concept or principle in our current tenets. This omission is recognized as being the lack of a concept of an end-state with enemy focus. We also see that the current tenets describe how to conduct operations as opposed to what should be done. Finally, we recognize that the current tenets are inputoriented, versus output, results-oriented. In order to determine how much of a difference these omissions make in quiding operations, we will now start by comparing the tenets to the imperatives.

As we have previously established, the imperatives prescribe key operating requirements, provide more specific guidance than the tenets, and are fundamentally necessary for success on the battlefield.62 We have also seen that the

tenets, as our foremost body of doctrinal principles, are described in equivalent terms: "Success on the battlefield will depend on the Army's ability to fight in accordance with four basic tenets" and the tenets are "fundamentally necessary for success on the modern battlefield."63 Therefore, each set of concepts separately describes fundamentals required for success on the battlefield, even though the imperatives are more specific. Having established the similar purpose of both tenets and imperatives, we would definitely expect, however, that the tenets would express the essence of the concepts embodied in the imperatives, even if in more general terms. We would also expect correlation and linkage between them, since each set serves the same purpose regarding the application of our doctrine.

We will again use the matrix format to compare these two sets of principles in order to investigate correlation and linkage, as shown in Appendix C. For purposes of this comparison, we will use the broadest interpretation of the imperatives, in accordance with explanations in FM 193-5, in order to gain the best possible correlation. \$4 Again, the column labeled "end state" is a term selected to represent the concept identified as missing from the tenets.

The comparison between the AirLand Battle tenets and imperatives illustrated in Appendix C leads to two major conclusions. First, in the context of broad interpretations for the concept each imperative and tenet represents, there is definitely significant linkage and correlation between the

sets. Second, the concept previously established as missing from the current tenets has the highest correlation with the imperatives.

requirements for success on the battlefield, we would expect the first conclusion. Indeed, not only is there significant correlation between the tenets and the imperatives, there is also a very high correlation among the tenets themselves. We would also expect this since it points to a coherent doctrine that has linkage between its principles. The fact that the current coctrine is cohesive does not weaken the position that it is incomplete. We have already established the fact of a missing ingredient, the remaining question we wanted to answer concerns how much of a difference this omission makes.

The second conclusion provides this answer. Since the missing concept has an extremely high linkage with the fundamental imperatives for success, it must be very important. Indeed, it would appear that we could substitute the missing concept for any of the other tenets and maintain a higher correlation and linkage with the imperatives. Bowever, we are not attempting substitution, but rather, we are seeking to complete our doctrine to provide more effective guidance for the conduct of operational art. The fact that there is a high correlation in expressing concepts between the current tenets and the suggested missing concept argues strongly for its inclusion

as a complementary concept. The high degree of linkage with the imperatives clearly suggests that it is very important and its inclusion would make a significant difference.

With the teneth is the principles of war. In our discussion of contrine and theory, we noted that the efficacy of having any principles has often been disputed.65 However, the U.S. Army has a long tradition of enumerating and endorsing principles of war. Ours originally appeared in 1921 in Mar Department Training Regulation 19-5. These were apparently adaptations of forerunners fathered by J.F.C. Fuller.66. The current U.S. Army principles of war were not included in the 1975 version of FM 195-5, but were reinstated in the 1982 version and remain in an appendix in the 1936 FM 197-5. This reflects the emphasis towards returning to fundamentals expressed in those manuals.

Since our principles of war are considered to be "the enduring bedrock of U.S. Army doctrine" that "provide timeless general suidance for the conduct of war"67 at all levels, they should have significant correlation with the tenets. The comparison of the tenets and the principles of war will be conducted in a similar manner and under the same conditions as was done with the imperatives. This comparison is shown in Appendix D. (Page 47)

The results of this comparison between the principles of war and the tenets are very similar to that of the imperatives and the tenets. Again, there is a fairly high correlation both with the principles of war and among the

the highest correlation. Indeed, this correlation with the missing concept would be even more skewed if broad interpretations of the tenets and principles of war were narrowed. For example, synchronization is not restricted to the offensive, nor are maneuvers or objectives always deep.

Significant. First, the principles of war are expressed in output-oriented terms that guide what versus how. To have seen previously that our tenets lack this characteristic. It is significant, but not surprising, then, that our pricing concept fills this void. Second, the principles of war all describe concepts that are either goal-oriented, or that describe activities in relation to the enemy. We have already established that determining an end state in terms of effect on the enemy is a key requirement for guiding campaigns and major operations in the conduct of the operational level of war. Therefore, our missing concept not only fills the void, it also does so in a way that clearly would make a significant contribution to providing effective guidance for conducting campaigns and major operations.

The final comparison, and for this study the most critical one, concerns the relationship between the tenets and the essential elements required of operational art. To have set the stage for this analysis by establishing what operational art is and what function it serves.

In Section II, we established the importance of the key

concepts of operational design: the center of gravity, lines of operation, and culminating points. We also saw that these concepts were clearly output-oriented, provided focus in relation to the enemy, and provided guidance in the form of what to do rather than how to do it. Earlier in this section, we introduced and established the concept that operational art is the process of linking ends, ways and means. During the course of the study we have seen that the current tenets lack the expression of concepts that address these critical requirements. We have seen that this appears to be an omission of rather crucial importance. To will determine the degree of importance in the following comparison.

The fundamental relationship and significance of the concept of ends, ways and means to the conduct of operational art is unquestionably clear in the statement from FM 100-5:

Reduced to its essentials, operational art requires the commander to answer three questions:

- (1) That military condition must be produced in the theater of war or operations to achieve the strategic goal?
- (2) That sequence of actions is most likely to produce that condition?
- (3) How should the resources of the force be applied to accomplish that sequence of actions? 58

Since our doctrinal manual itself establishes these critical requirements for conducting the operational level of war, it is of essential consequence to this study to resolve two pasic issues. First, since our tenets are meant to provide the fundamental principles governing how our forces will fight, do they provide adequate guidance to fulfill the

requirements of operational art stated above? Second, if the tenets do not provide adequate guidance, does our proposed concept provide a significantly important addition to answering the questions required to successfully guide the conduct of operational art?

Figure 1 again uses a matrix comparison to depict the relationship of the tenets to the essential requirements of operational art. These requirements of operational art are directly linked to and express the concept of their correlative fundamental in the operational art process of ends, ways and means, which are shown in parenthesis below their respective requirement of operational art. The idea of an end state is expressed by producing conditions in the theater to achieve a goal. The concept of ways is directly supportive of the question that seeks to determine what sequence of actions is required to produce the desired condition. Finally, means describes the concept of what resources are available and how they should be applied.

OF OPERATIONAL ART I		AGILITY	DEPTH	SYNCHRO- NIZATION	END STATE
Military conditions to achieve goal (Ends)					x
Sequence of Actions to provide condition (Ways)	x	х	x	x	x
Application of Resources to accomplish sequence of actions (Means)	x	x	х	x	X

Figure $\underline{1}$ Comparison of ALB Tenets and $\overline{\mathtt{E}}$ ssential Requirements of Operational Art

Again, we use the label of end state to represent the proposed additional principle. This comparison very vividly and concisely provides the answers regarding the adequacy of the current tenets and the importance of the proposed concept in providing guidance for conducting operational art. current tenets only provide guidance regarding the ways and means of operational planning, while the proposed concept is the only one that addresses the requirement of achieving an end or goal. We again see a high degree of correlation and linkage between at least two of the three requirements of operational art and the tenets, and between the tenets themselves. The internal interrelationship between the tenets in this comparison further amplifies the coherence of current doctrine, at least to the extent that the tenets are complementary with respect to the ways and means of operational art. However, they do not address the ends at all. Therefore, the answer to the first question posed above is that the current tenets do not provide adequate guidance because they do not address all three essential requirements of operational art.

We must now determine the importance of the additional contribution provided by the proposed concept. The quote at endnote 68 introduces the three questions of operational art as essential for the commander to answer in campaign planning. We have also previously established that the essence of operational art is the identification of the enemy's center of gravity and the concentration of superior

compat power against it to achieve decisive success.69 Only our proposed principle adequately addresses these concepts, which are stated in our doctrine as being essential to, and the essence of, operational art. To further support the importance of the contribution the proposed concept provides, we consider the following. Professor James J. Schneider, of the School of Advanced Military Studies, states in his comprehensive "Theoretical Paper No. 3, The Theory of Operational Art" in his discussion of ends, ways and means:

...rational human action begins with the establishment of ends or aims. In warfare this may be the single most important decision a commander can make. The selection of the end implies the clear and complete visualization of an end-state toward which all military action is directed. The attainment of this end-state assumes the creation and maintenance of a situation that is favorable to the forces under command. The military action must therefore be effective.70

There are two key points in this statement regarding our analysis. First, if the establishment of ends or aims is the single most important decision a commander makes, certainly we should expect our doctrine to express this in its tenets. Since our tenets do not express this concept, it is extremely important that any additional tenet should capture the essence of this critical concept. The second point is to compare what our current tenets do for doctrine regarding effectiveness versus efficiency. Figure 1 and our previous analysis shows that the current tenets focus on inputs and the how, versus what, concerning operations. These attributes describe efficiency, not effectiveness, by being output-oriented and focusing on effectiveness, the enemy and an end-

state, our proposed principle therefore fills a very critical void. Moreover, it contributes a significantly important additional concept to provide guidance for the conduct of operational art.

V. Summary and Conclusion

It is not an idle academic exercise to critically examine doctrine. Indeed, the doctrinal debate following the publication of the 1975 version of FU 180-5 led to the improved version we have today. The fact that we have a strong doctrine does not mean it can not evolve and be improved by including additional concepts.

The AirLand Battle concept has gone a long way towards providing the U.S. Army an effective and well accepted doctrine. It has reestablished the importance of maneuver warfare and the spirit of the offensive. It has also placed emphasis on fundamentals and principles.

As an expression of these fundamentals and principles, the tenets of AirLand Tattle serve an important function in their attempt to capture the essence of the key concepts of our doctrine. They come close in this attempt. This study shows, however, that they fail to include a critical concept, one that is especially important at the operational level of war.

The missing concept is complex--perhaps too much so to be expressed in one word. The concepts not found in the current tenets are easier to identify. The tenets do not express the concept of an end state. They are not goal-oriented, therefore they do not provide for focused activity to cause defeat of the enemy. They describe how, versus what, and are therefore input rather than output-oriented. This is the missing concept is complex, we have established

that its absence results in a significant deficiency in the concepts expressed by the current tenets to provide complete overational guidance.

examined. The German and Soviet doctrines each have many principles that express the concept we are missing in the tenets. Indeed, NATO's "selection and maintenance of the aim" propably accurately captures the essence of all the missing components of the concept, yet our tenets supporting this alliance doctrine are lacking in this regard. We have found that our own imperatives and principles of war exgress the concept missing in the tenets. Finally, both our key concepts of operational design and the essential requirements of operational art address center of gravity and the concepts of end state and goals as critical to the successful conduct of war. If all these sources of guidance for the conduct of operations contained the concept missing from the tenets, then that concept must be important.

The impact of this doctrinal deficiency is critical at the operational level of war. In the comparison of the tenets with the essential elements of operational art, we found that, while the tenets provided guidance for the ways and means of conducting the operational level of war, focus on the critical end state was entirely absent. This study provides strong support for including the missing concept to ensure our tenets provide the operational guidance required to defeat the enemy. The entire study is best summarized in

a joint made by Colonel (Ret.) Marry Summers, when he observed that commanders who concern themselves with action and not the goal will rarely obtain their objective.71

Appendix A: Comparison of ALB Tenets and German Principles

GERMAN DOCTRINAL PRINCIPLE IND Mission oriented C2 to specify obj but not how	<u>FIATIVE</u>	AGILITY	<u>DEPRU</u>	SYNCHRO-	END <u>STATE</u> L
Coord efforts focused on common obj				X.	X
Take Calculated risks	X				X
Retain freedom of action	x	37 - h		``(*** ***
Adopt simple solutions to achieve goals					77
Coord fire & movement at decisive points to destroy enemy	Х	Х	X	X	X
Employ barriers to wear down & stop enemy			Z	×	X
Establish & maintain striking power by fire speed, protection	Х	X		3	X
Surprise enemy by speed secrecy, deception	, X	X		Х	Υ.
Employ EM for decisive results				3	X
Provide adequate log & med. spt					
Harmonize forces, time & space with objective		Х	Х	X	X
Employ units IAW cbt power to achieve effectiveness		х		ж	K

Appendix A: Continued

GERMAN DOCTRINAL PRIMCIPLE IN	HTIATIVE	AGILITY	DEPCH	SYUCHRO- HIZATION	BHD STAPT
Adapt time avail to gain decisive advantages	7.	X			Ж
Use Space & terrain to wear down & disrupt enemy	: Х	Х	ж	%	Ž.
Task organize & dispos forces IAW cdrs. intent	se		X	X	X
Establish a point of main effort	Х			Ж	77
Plan reserves for decisive action	X	X	X	X	X
Economizing forces to maintain efficiency		X.			7.

Appendix 3: Comparison of ALS Tenets and Soviet Principles

SOVIET DOCTRINAL PRINCIPLE IN	HULLATIVE	AGILITY	DEPTH	SYMCHRO- MIZATION	EMD STACE
Constant high readiness of units	;				
High aggresiveness, decisiveness, initiative & continuity of combat	7 X	X			X
Surprise actions	7 9 42	Х		%.* 	::
Coord. joint use a continuous interaction of branches and services		K		х	
Decisive concentration of main effort in main direction		X		Х	**
Haneuver of units, nucl strikes & fire	lear	X			
Full consideration a use of moral, political psych factors to carrout assigned mission					X.
Comprehensive combat support					
Maintenance & timely restoration of troop fighting efficiency					
Firm & continuous C2 & persistence in attaining goals & fulfilling miss					X
Comprehensive security of combat activity					Y.
Simultaneous destruction depth & short period & clever maneuver at rapid tempo		X	X	X	X
at tapia tempo	()	• 3	4.3	~)	

Appendix C: Comparison of ALB Tenets and Imperatives

ALB IMPERATIVES	<u>IMITIATIVE</u>	AGILITY	<u>DDPTII</u>	SYUCURO- MIZATION	EMD STATE
Ensure Unity of Effort				7.	Ж
Anticipate Battle- field events	Х	К	:C	ž	7
Concentrate combat power against enemy vulnerabilitie	98	Х	X	A.	Z.
Designate, sustain a shift main effort	ind X	X	77	Х	7.
Press the fight	X	X	X	37	X
Hove fast, strike hard, finish rapidly	X	X		Χ	X
Use terrain, weather Jaception & OPSEC	x				
Conserve strength fo decisive action	or X	Х	X	X	::
Combine arms & siste services to compleme & reinforce			X	X	V.

Understand the effects of batttle on soldiers, units & leaders

Appendix D: Comparison of ALB Tenets and the Principles of Mar

PRINCIPLES OF VAR	INITIATIVE	AGILITY		SYNCHRO-	211) 2111/112
OSJECTIVE-direct operation towards objective			 M	Х	М
<u>OFFERSIVE</u> Sieze Initiative	Z	X		Х	**
MASS-Concentrate at decisive time & place	Х	у .	7	Х	
ECONOLY OF FORCE Allocate minimum power to secondary effort		х		Х	X
<u>HANEUVER</u> -Place enemat disadvantage thr flexible application of compat power	u	**	77	X	x
UNITY OF COUNAND-En unity of effort und one commander to fo on common goal	er			Х	3
SECURITY-Deny enemy unexpected advantag					<u> </u>
SURPRISE-Strike enemy at time place in manner for which is unprepared		¥		X	**
SIMPLICITY-Prepare uncomplicated, concorders to ensure understanding of and intent	ise orough	X		Y 15	Ж

Note: Definitions of Principles of Mar from FM 199-5

ENDNOTES

- 1. U.S. Army, Field Manual 100-5, Operations, (May 1986), pp. i-ii.
- 2. Ibid., p. 15.
- 3. Ibid., pp. 22-23.
- 4. Ibid., p. 10.
- 5. Joint Chiefs of Staff, JCS PUB 0-1, Basic National Defense Doctrine, (Initial Draft), (Washington, D.C., November 1989), p. GL-6.
- 6. FM 100-5, Operations, p. i.
- 7. MAJ R. A. Doughty, <u>Leavenworth Paper No. 1, The Evolution of U.S. Army Tactical Doctrine, 1946-76</u>, (Fort Leavenworth, KS, 1979), p. 1.
- 8. MAJ P.H. Herbert, <u>Leavenworth Paper No. 16, Deciding What</u> Has to Be Done: <u>General William E. DePuy and the 1976 Edition of FM 100-5, Operations</u>, (Fort Leavenworth, KS 1988), pp. 1-2.
- 9. Charles E. Heller and William A. Stofft, ed., America's First Battles, 1776-1965, (Lawrence, 1986), p. 332.
- 10. Herbert, Leavenworth Paper No. 16, p. 1.
- 11. John L. Romjue, From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982, TRADOC Historical Monograph, (Fort Monroe, 1984), p.57.
- 12. FM 100-5, Operations, pp. 22-23.
- 13. Ibid., pp. 14-15.
- 14. GEN John W. Foss, "Command", Unpublished article.
- 15. MAJ John T. Nelson II, "Where to go From Here?: Considerations for the Formal Adoption of Auftragstaktik by the U.S. Army", SAMS Monograph, (December 1986), p.4.
- 16. U.S. Army, Field Manual 25-2, Unit Training Management, (September, 1984), pp. 26-32.
- 17. FM 100-5, Operations, pp. 27-29.
- 18. Ibid., pp. 179-180.

THOROTTS Cont.

- 19. Ibid., po. 180-182.
- 20. COL (Ret.) Arthur F. Lykke, Jr., ed., <u>Military Strategy:</u> Theory and <u>Application</u>, (Carlisle Barracks, PA, 1930), p.19.
- 21. James J. Schneider, Theoretical Paper No. 3, The Theory of Operational Art, (Draft), (Fort Leavenworth, 1938), p.15.
- 22. Liddell Bart, Strategy, (New York, 1974), p. 33%.
- 23. Lykke, Hilitary Strategy: Theory and Application, p. 19.
- 24. H.H.E. Lloyd, The History of the Late Mar in Germany letween the Kinc of Prussia and the Empress of Germany and her Allies, (London, 1765), By a General Officer, Preface, p.5.
- 25. Field Marshal Viscount William Slim, <u>Defeat Into Victor</u>, (London, 1956), p. 551.
- 26. Fit 199-5, Operations, pp. 22-23.
- 27. The Federal Minister of Defense, MDv 133/139, Commany and Control of Armed Forces, (Bonn, 1937), p. 6-1.
- 23. LTC (Ret.) William Baxter, Soviet AirLand Battle Doctrine, (Novato, CA, 1985), p. 24%.
- 29. A.A. Grechko, The Armed Forces of the Soviet Union, (Moscom, 1977), p. 273.
- 30. Baxter, Soviet AirLand Battle Doctrine, pp. 23-31. and V-G. Reznichenko, Taktika (Tactics), Translation as GPMS-UN-82-136-L-I, (Foreign Broadcast Information Service, 1989), p. 27.
- 31. Baxter, Soviet Airland Battle Doctrine, pp. 5, 15.
- 32. Reznichenko, Taktika, p. 27.
- 33. FM 179-5, Operations, p. 17.
- 34. HDv 190/100, b. 7-4.
- 35. Ibid., b. 6-2.
- 35. Saxter, Soviet AirLand Battle Doctrine, p. 24.
- 37. Ibid., p. 23.
- 30. Erich von Manstein, <u>Lost Victories</u>, (Chicago, 1950), ap. 374-375.

BUDDOTES Cont.

- 39. Ibid., p. 433.
- 49. LTC William M. Janes, "Operational Art in MATO: How will Politically Notivated Destrictions Affect Operational Maneuver?", AOSF Monograph, (January, 1988), p. 12.
- 41. Hanstein, Lost Victories, pp. 231-230.
- 42. G.P. Ivanov-Humjiev, The Dattle of Kursk, (Moscow, 1973), pp. 35-41.
- 43. North Atlantic Treaty Organization, ATP-35 (A), Land Forces Tactical Doctrine, (Brussels, 1984), pp. 1-1 1-2.
- 44. Ibid., p. 1-2.
- 45. Romjue, From Active Defense to AirLand Pattle: The Development of Army Doctrine 1973-1982, TRADOC Mistorical Ponograph, (Fort Monroe, 1984), p. 44. and Merbert, Leavenworth Paper To. 15, p. 97. It is interesting to note that General Starry, who was closely involved in developing the 1976 version of FM 100-5, admits that the earlier version did not address operational art. In an interview with MAJ Merbert, Starry says: "I must admit I simply hadn't...an answer to [that] in the '76 edition. We tackled the tactical problem up forward [but] we kind of brushed aside the operational level considerations, the theory-level considerations... That gelled it for me was being a corps commander."
- 46. Ibid., (Romjue), p. iii.
- 47. Ibid., bb. 44.
- 48. Ibid., pp. 44, 98-99.
- 49. 31 199-5, Operations, (Final Draft, January 1982), p. 2-1.
- 50. Roajue, "From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1982", p. 55-59.
- 51. Fil 100-5, Operations, (Coordinating Draft, February 1931), p. 2-4.
- 52. Romjue, "From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1932", p. 57.
- 53. Fit 130-5, Operations, (Final Draft, January 1982), p. 2-2.
- 54. FH 100-5, Operations, (August, 1932), p.2-1.
- 55. Fit 179-5, Operations, (May, 1986), p. 23.

EMPNOTES Cont.

- 55. FM 100-5, Operations, (Coordinating Draft, February 1981), p. 2-5.
- 57. 31 100-5, Operations, (May 1936), p. 10.
- 50. COL Richard A. Sinnreich, <u>U.S. Army AirLand Dattle Priefins</u>, (SANS, January 1986), p. 7.
- 59. MAJ Myron J. Griswold, "Considerations in Identifying and attacking the Enemy's Center of Gravity", AMSP Monograph, (May, 1986), p. 1.
- 50. Michael Howard, Clausewicz, (Oxford, 1983), p. 35.
- 61. Janes, "Operational Art in NATO--How Will Politically Notivated Restrictions Affect Operational Maneuver?", p. 4.
- 62. FM 199-5, Operations, p. 23.
- 63. Ibid., pp. 15, 23.
- 64. Ibid., pp. 23-26.
- 55. Lykke, Military Strategy: Theory and Application, p. 16.
- 55. Ibid., p. 15.
- 67. Fit 199-5, Operations, p. 22.
- 63. Ibid., p. 1J.
- 59. Ibid., p. 15.
- 76. Schneider, Theoretical Paper No. 3. The Theory of Operational Art, p. 17.
- 71. Baxter, Soviet AirLand Battle Doctrine, p. 239.

BIBLIOGRAPHY Books

- Baxter, LTC (Ret.) William. Soviet AirLand Battle Doctrine. Novato, CA: Presidio Press, 1985.
- Grechko, A.A. The Armed Forces of the Soviet Union. Moscow: Progress Publishers, 1977.
- Hart, Liddell. Strategy. New York: The New American Library, Inc., 1974.
- Heller, Charles E. and William A. Stofft, ed. America's First Battles: 1776-1965. Lawrence: University Press of Kansas, 1986.
- Howard, Michael. Clausewitz. Oxford: Oxford University Press, 1983.
- Ivanov-Mumjiev, G.P. The Battle of Kursk. Moscow: Progress Publishers, 1978.
- Lloyd, H.H.E. The History of the Late War in Germany Between the King of Prussia and the Empress of Germany and her Allies. London, 1766.
- Lykke, Col. (Ret.) Arthur F., Jr., ed. Military Strategy: Theory and Application. Carlisle Barracks, PA, 1989.
- Manstein, Erich von. Lost Victories. Edited and translated by Anthony G. Powell. Novato, CA: Presidio Press, 1982.
- Reznichenko, V.G. <u>Taktika</u> [Tactics]. Translation as JPRS-UMA-88-008-L-I. Foreign Broadcast Information Service, 1988.
- Slim, Field Marshal Viscount William. Defeat Into Victory. London: Cassell & Company Limited, 1956.

GOVERNMENT PUBLICATIONS AND SERVICE MANUALS

- ATP-35 (A), Land Force Tactical Doctrine. Brussels, Belgium: North Atlantic Treaty Organization, 1984.
- Doughty, MAJ Robert A. The Evolution of U.S. Army Tactical Doctrine, 1946-76. Leavenworth Paper No. 1. Combat Studies Institute, Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1979.
- Field Manual 25-2, Unit Training Management. Washington, D.C.: HQ Department of the Army, 1984.

BIBLIOGRAPHY Cont.

- Field Manual 100-5, Operations. (Coordinating Draft), Washington D.C.: HQ Department of the Army, February 1981.
- Field Manual 100-5, Operations. (Final Draft), Washington, D.C.: HQ Department of the Army, January, 1982.
- Field Manual 100-5, Operations. Washington, D.C.: HQ Department of the Army, 1982.
- Field Manual 100-5, Operations. Washington, D.C.: HQ Department of the Army, 1986.
- HDv 100/100, Command and Control of Armed Forces. (Translated), Bonn: The Federal Minister of Defense, 1987.
- William E. DePuy and the 1976 Edition of FM 100-5, Operations. Leavenworth Paper No. 16. Combat Studies Institute, Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1988.
- JCS PUB 0-1, Basic National Security Doctrine. (Initial Draft), Washington, D.C.: The Joint Chiefs of Staff, 1989.
- Romjue, John L. From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1982. TRADOC Historical Monograph Series. Fort Monroe, VA: U.S. Army Training and Doctrine Command, 1984.

MONOGRAPHS AND PAPERS

- Griswold, MAJ Myron J. "Considerations in Identifying and Attacking the Enemy's Center of Gravity." AMSP Monograph, December, 1986.
- Janes, LTC William H. "Operational Art in NATO: How will Politically Motivated Restrictions Affect Operational Maneuver?" AOSF Monograph, January, 1988.
- Nelson, MAJ John T. II. "Where to Go From Here?: Considerations For the Formal Adoption of <u>Auftragstaktik</u> by the U.S. Army." AMSP Monograph, December, 1986.
- Schneider, James J. Theoretical Paper No. 3, The Theory of Operational Art. (Draft 2nd Revision), Fort Leavenworth, KS: U.S. Army Command and General Staff College, March, 1988.
- Foss, General John W. "Command." Unpublished article.
- Sinnreich, COL Richard H. "U.S. Army AirLand Battle Briefing", Fort Leavenworth, KS: School of Advanced Military Studies, 1986.